Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

PLANETARY PHENOMENA FOR MARCH AND APRIL, 1900.

By Malcolm McNeill.

March.

The Sun passes the vernal equinox and Spring begins March 20th, 5 P. M., P. S. T.

At the beginning of the month *Mercury* is an evening star, setting an hour and twenty minutes after the Sun. This interval increases slightly until March 8th, when the planet reaches greatest east elongation. After that the distance between Sun and planet rapidly diminishes, and inferior conjunction is reached on March 24th, when the planet changes to a morning star. The March elongation and the one which will come early in July afford the best opportunities of the year for seeing *Mercury* in the evening.

Venus is an evening star well out toward greatest east elongation. It is still increasing its distance from the Sun, and is moving rapidly eastward and northward among the stars. At the end of the month it sets nearly four hours after sunset. It moves from the constellation *Aries* into *Taurus*, and at the end of the month it is near the *Pleiades*, a little south and west.

Mars still keeps its position as a morning star, rising about half an hour before sunrise. Its apparent distance from the Sun increases a little during the month.

Jupiter rises earlier, at 1:14 A. M. on March 1st, and at 11:20 P. M. on March 31st. It is still in the constellation *Scorpio*, and moves slowly eastward about 1° among the stars until March 27th, when it becomes stationary, and then moves slowly westward.

Saturn by the close of the month rises about 1 A. M. It is in the constellation *Sagittarius*, and moves slowly eastward with diminishing rapidity, as it has nearly reached its stationary point. It will be occulted by the Moon on the morning of March 24th, the occultation lasting from 1:31 to 2:38 A. M. at Washington local time. Times for other parts of the country must be determined separately.

Uranus is near *Jupiter*, in the constellation *Scorpio*. It moves eastward a little until March 17th, and then begins to move westward. At the end of the month it is 2° east and 1° south of *Jupiter.*

Neptune is still on the border of *Taurus* and *Gemini*, nearly stationary.

APRIL.

Mercury is a morning star throughout the month, and comes to greatest west elongation on April 21st. At this date its apparent distance from the Sun is 9° greater than at the greatest east elongation in March; but the planet in April is so far south of the Sun in declination that it will not be easy to see, the interval between the rising of the planet and sunrise being less than an hour.

Venus is an evening star, and reaches greatest eastern elongation on April 28th, when its apparent distance from the Sun is 45° 35′. Throughout the month it sets about four hours after sunset. It moves from a position near the *Pleiades* in *Taurus* into *Gemini*, 34° eastward and 6° northward, during the month.

Mars is still close to the Sun, and by the close of the month rises about an hour before sunrise, too short an interval to allow the planet to be seen unless under exceptional conditions of weather.

Jupiter rises two hours earlier than during March, and is getting into position for late evening observation. It is retrograding, moving westward in the constellation *Scorpio*, the motion being about 2° during the month, and is almost exactly following the path marked out by its motion in the early part of the year.

Saturn is almost stationary among the stars, moving a little eastward to April 14th, and then moving westward. It rises about two hours earlier than during March.

Uranus is still in the neighborhood of *Jupiter*, and, like it, is retrograding; but the greater westward motion of *Jupiter* causes their apparent distance to increase from 2°, on April 1st, to 3°, on April 30th.

Neptune moves about 1° eastward on the border of *Taurus* and *Gemini.*

EXPLANATION OF THE TABLES.—The phases of the Moon are given in Pacific Standard time. In the tables for Sun and planets, the second and third columns give the Right Ascension and Declination for Greenwich noon. The fifth column gives the local mean time for transit over the Greenwich meridian. To find the local mean time of transit for any other meridian, the time given in the table must be corrected by adding or subtracting the change per day, multiplied by the fraction whose numerator is the longitude from Greenwich in hours, and whose denominator is 24. This correction is seldom much more than 1^{m}. To find the standard time for the phenomenon, correct the local mean time by *adding* the difference between standard and local time, if the place is west of the standard meridian, and *subtracting*, if east. The same rules apply to the fourth and sixth columns, which give the local mean times of rising and setting for the meridian of Greenwich. They are roughly computed for lat. 40°, with the noon Declination and time of meridian transit, and are intended as only a rough guide. They may be in error by a minute or two for the given latitude, and for latitudes differing much from 40° they may be several minutes out.

MARCH-APRIL, 1900.

PHASES OF THE MOON, P. S. T.

			H. M.
First Quarter,	March	7,	9 34 P.M.
Full Moon,	March	16,	12 12 A.M.
Last Quarter,	March	23,	9 36 P.M.
New Moon,	March	30,	12 30 P.M.
First Quarter,	April	6,	12 55 P.M.
Full Moon,	April	14,	5 2 P.M.
Last Quarter,	April	22,	6 33 A.M.
New Moon,	April	28,	9 23 P.M.

THE SUN.

1900	R. A. H. M.	Declination. ° ′	Rises. H. M.	Transits. H. M.	Sets. H. M.
Mar. 1,	22 48	— 7 38	6 38 A.M.	12 13 P.M.	5 48 P.M.
11,	23 25	— 3 46	6 22	12 10	5 58
21,	0 2	+ 0 10	6 7	12 7	6 7
Apr. 1,	0 42	+ 4 29	5 49	12 4	6 19
11,	1 18	+ 8 15	5 33	12 1	6 29
21,	1 55	+ 11 48	5 19	11 59 A.M.	6 39
May 1,	2 33	+ 15 1	5 5	11 57	6 49

MERCURY

Mar. 1,	23 46	— 1 9	7 15 A.M.	1 11 P.M.	7 7 P.M.
11,	0 25	+ 5 32	6 51	1 10	7 29
21,	0 20	+ 5 58	6 6	12 26	6 46
Apr. 1,	23 51	+ 0 43	5 12	11 14 A.M.	5 16
11,	23 51	— 2 2	4 41	10 34	4 27
21,	0 18	— 0 48	4 23	10 21	4 19
May 1,	1 1	+ 3 25	4 14	10 25	4 36

Venus.

Mar. 1,	1 10	+ 7 34	8 9 A.M.	2 35 P.M.	9 1 P.M.
11,	1 54	+ 12 28	7 56	2 39	9 22
21,	2 38	+ 16 54	7 45	2 44	9 43
Apr. 1,	3 28	+ 21 1	7 35	2 50	10 5
11,	4 13	+ 23 54	7 28	2 56	10 24
21,	4 59	+ 25 52	7 26	3 2	10 38
May 1,	5 43	+ 26 51	7 26	3 7	10 48

Mars.

Mar. 1,	22 12	− 12 20	6 18 A.M.	11 36 A.M.	4 54 P.M.
11,	22 42	− 9 27	5 59	11 27	4 55
21,	23 11	− 6 25	5 39	11 17	4 55
Apr. 1,	23 43	− 2 59	5 15	11 5	4 55
11,	0 11	+ 0 9	4 55	10 54	4 53
21,	0 39	+ 3 15	4 32	10 43	4 54
May 1,	1 8	+ 6 17	4 11	10 32	4 53

Jupiter.

Mar. 1,	16 33	− 21 5	1 14 A.M.	5 59 A.M.	10 44 A.M.
Apr. 1,	16 38	− 21 11	11 17 P.M.	4 1	8 45
May 1,	16 30	− 20 55	9 11	1 56	6 41

Saturn.

Mar. 1,	18 15	− 22 24	3 1 A.M.	7 40 A.M.	12 19 P.M.
Apr. 1,	18 21	− 22 21	1 6	5 45	10 24 A.M.
May 1,	18 21	− 22 20	11 7 P.M.	3 46	8 25

Uranus.

Mar. 1,	16 44	− 22 14	1 29 A.M.	6 9 A.M.	10 49 A.M.
Apr. 1,	16 45	− 22 14	11 27 P.M.	4 7	8 47
May 1,	16 41	− 22 9	9 26	2 6	6 46 A.M.

Neptune.

Mar. 1,	5 35	+ 22 4	11 40 A.M.	6 59 P.M.	2 18 A.M.
Apr. 1,	5 36	+ 22 6	9 42	5 1	12 20
May 1,	5 39	+ 22 9	7 46 A.M.	3 6	10 26 P. M.

Eclipses of *Jupiter's* Satellites, P. S. T.

(Off left-hand limb as seen in an inverting telescope.)

		H.	M.				H.	M.	
II, R,	Mar. 2,	11	42	P.M.	II, D,	Apr. 3,	8	52	P.M.
III, D,	6,	11	34		I, D,	6,	4	10	A.M.
III, R,	7,	1	8	A.M.	I, D,	7,	10	38	P.M.
I, D,	7,	2	8		II, D,	10,	11	26	
II, D,	9,	11	55	P.M.	III, D,	11,	7	22	
II, R,	10,	2	15	A.M.	III, R,	11,	9	1	
III, D,	14,	3	31		I, D,	15,	12	31	A.M.
III, R,	14,	5	6		II, D,	18,	2	1	
I, D,	15,	10	29	P.M.	III, D,	18,	11	19	P.M.
II, D,	17,	2	28	A.M.	III, R,	19,	12	58	A.M.
II, R,	17,	4	49		I, D,	22,	2	25	
I, D,	21,	5	54		I, D,	23,	8	53	P.M.
I, D,	23,	12	23		I, D,	25,	4	35	A.M.
II, D,	24,	5	2		III, D,	26,	3	16	
I, D,	30,	2	16		III, R,	26,	4	57	
					I, D,	29,	4	19	
					I, D,	30,	10	47	P.M.

(THIRTY-SEVENTH) AWARD OF THE DONOHOE COMET-MEDAL.

The Comet-Medal of the Astronomical Society of the Pacific has been awarded to M. E. Giacobini, of the Nice Observatory, for his discovery of an unexpected comet on September 29, 1899.

The Committee on the Comet-Medal,

James E. Keeler,
Wm. M. Pierson,
Chas. Burckhalter.

1899, December 2.